MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2017/2018

BSI3124 – SEMINAR IN INVESTMENT

(All sections / Groups)

4 JUNE 2018
9.00 A.M.-11.00 A.M.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **7** pages. There are total **4** questions.
2. Answer **ALL** questions.
3. Marks are shown at the end of each question.

Answer all questions in the answer booklet provided.

QUESTION 1 (25 MARKS)

(a) Read the extracted journal and answer the following questions.

Malaysian construction firms' social sustainability via organizational innovativeness and government support: The mediating role of market culture

Abstract

The increasing demand by construction stakeholders for ecologically viable construction is pushing the construction firms to adopt social sustainability practices while executing construction projects. While there are several studies establishing how external factors and organizational innovativeness have been influencing social sustainability performance of construction firms, social sustainability performance of Malaysian construction firms is still relatively low. This study therefore proposed that market orientation culture is a significant mediator through which government support can favourably influence firm's social sustainability performance. Empirical support for the argument was derived from the data collected from 172 large construction firms in the Malaysian construction industry. The results suggest that construction firms require managerial initiatives to comply with government regulations and leverage it to facilitate market orientation cultures so as to improve their social sustainability performance.

1. Introduction

Sustainability practices have evolved within the construction industry over time. Its increasing benefits have made firms to relinquish the traditional construction techniques. Obviously, the construction industry's contribution to ecosystem degradation, climate change, and several interdependent issues call for a shift to sustainability principles and marketing approaches to address the underlying ecological loads of construction projects (Seebode et al., 2012). The concept of Triple Bottom Line (TBL), which came up in 1994, considered environmental protection, social performance and financial performance in project execution (Elkington, 1994). This principle suggests that sustainability will be achieved in construction with the inclusion of social, economic and environmental performance, wherein emphasis is not only placed on financial gains, but the environment and human society are also given equal considerations.

However, the most challenging aspect of construction sustainability is the social justice, as it deals with issues of legal, moral and ethical requirements of construction firms towards the intending users and other stakeholders (Bevan and Yung, 2015; Hill and Bowen, 1997). Also, as part of its social obligations, the construction industry is required to balance human needs with the carrying capacity of the natural and cultural

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environments (Sev, 2009). This obligation commences from the design stage, where the architectural design should essentially incorporate occupants' safety, health, physiological comfort, physiological satisfaction and productivity. This was also supported by Shen et al. (2007) that social sustainability in construction should seek not only to improve the quality of human life but should also introduce skills training and capacity building for the less-privileged, so as to ensure fair distribution of social benefits while also observing an intergenerational justice.

Although, a unified definition of social sustainability has not been agreed upon, most researchers and international organizations have considered social sustainability in construction under different sub-categories. In most of the categorizations, organizational performance, sustainability reporting standards, stakeholders' engagement, organizational ethical behaviour, corporate commitment towards improving the quality of life of their employees and the communities gained prominence (Ye and Xiong, 2011; Zhao et al., 2012). According to Khalili and Duecker (2013), social sustainability emphasizes a pattern of creating favourably built environment by carefully applying construction processes and services so that overall efficiency is increased and the risks to human beings and the environment is reduced. The emergence of this social criteria, and the need for the involvement of multiple stakeholders in strategic planning for sustainability achievements in the built environment, have resulted in the development of more proactive management programmes, aiming at securing the built environment while also improving the financial benefit of the construction firms.

While previous studies have established that client's demands for sustainable construction are pushing businesses towards its adoption, the rising regulatory pressure to reduce impacts on the intending users and other stakeholders may require firms to redesign their organizational culture and marketing strategies. Another possible solution is to channel innovative construction technologies and products towards reducing the ecological and social burden of construction projects. So, understanding the role of innovativeness in facilitating construction social sustainability is essential for construction firms to meet stakeholders' needs. Community advocates have also indicated that while these social considerations may seem intangible to construction firms, they are as important as environmental and economic dimensions (Hammond and Peterson, 2007).

Although there are several studies on sustainability within the Malaysian Construction Industry (e.g., Abidin, 2009; Hamid & Kamar, 2012; Osman et al., 2012; Shari and Soebarto, 2012), little attention has been given to the influence of construction product innovativeness, government support and market orientation culture on social sustainability practices among construction firms in single study. Also, studies have identified several unsafe practices of construction firms affecting the users and the generality of the local communities, and the need for the Malaysian Construction Industry (MCI) to demonstrate its ability to meet global sustainability standards (Abidin, 2009). Consequently, various legislations and policies like the Tenth Malaysian Plan (2011–2015), Construction Industry Master Plan (CIMP, 2006–2015) and so forth, have

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been developed in relation to social sustainability considerations within the construction industry. However, the fundamental elements of product innovativeness, government support, and market culture within the construction industry are not well researched. Thus, this study fills this gap by applying the resource-based view (RBV) theory (which is based upon organization's managerial capabilities to combine its strategic resources to gain competitive advantage and exploit market opportunities) to investigate the effects of organizational innovativeness and other relevant external factors on firm social sustainability performance, due to the intervening role of market culture. While government support has been identified in several studies as an external factor influencing sustainability adoption by construction firms (Abidin et al., 2013; Akadiri and Fadiya, 2013; Bamgbade et al., 2015), social sustainability practices within the Malaysian construction industry is still low (Samari et al., 2013). In this respect, it was argued that government's support for construction firms' practices is mediated by the market culture such that social sustainability practices are more enhanced.

(Source: Bamgbade, Kamaruddeen and Nawi (2017), Malaysian construction firms' social sustainability via organizational innovativeness and government support: The mediating role of market culture, Journal of Cleaner Production, Vol. 154, pp. 114-124)

(i) Identify the research problem. (7 marks)

(ii) Discuss the research question that the researchers intend to carry out in the study. (7 marks)

(b) Explain risk and return. Give 2 alternative measures of risk and return. (6 marks)

(c) Discuss passive portfolio management strategies. (5 marks)

QUESTION 2 (25 MARKS)

(a) Some past literature on efficiency market hypotheses reported that apart from beta, there are other factors should be considered to estimate the expected returns. Firstly, explain what beta is. Second, discuss any two other variables and their importance. (11 marks)

(b) Generally, investors are concerned whether markets are efficient in making their investing decision. Efficient market hypothesis is built based on certain assumptions. Provide at least three of its assumptions. If you are having two stocks, discuss two factors that may differentiate the efficiency of the two stocks. (14 marks)

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QUESTION 3 (25 MARKS)

(a) In practice, beta may not be the only factor explaining stock return. Extensive research on the practical models had been done to explain stock return. Carhart (1997)'s four-factor asset pricing model is presented below.

The four-factor asset pricing model on the Polish stock market

2. Model and methods

According to Cochrane (2001), the central asset-pricing formula may be expressed as:
$$E_{t-1}(M_t R_t) = E(M_t R_t | I_{t-1}) = 1, \quad (1)$$

where R_t denotes portfolio returns at time t, I_t is the information set at time t, M_t is a stochastic discount factor – the same for each portfolio under study. The most popular specification of M_t in empirical studies is a linear function of a set of Kproxies such that:
$$M_t = a + \beta_1 f_{1,t} + \ldots + \beta_K f_{K,t} = a + \beta^T F_t, \quad (2)$$

where $F_t = (f_{1,t}, \ldots, f_{K,t})^T$ is a vector of factors' values at time t, $\beta = (\beta_1, \ldots, \beta_K)$ denotes vector of risk factor sensitivities or loadings. The discussion in this article focuses on the case where β is the same throughout the entire sample period. Under this assumption the conditional model (1) is equivalent to the unconditional model.

In the classical CAPM K is equal to 1 and the underlying factor is the RM of the market portfolio, denoted as RM_t. In the three factor model of Fama and French (1993) the factors are: the RM of the market portfolio (RM_t), the difference between returns on small and big stock portfolios (SMB_t) and the difference between returns on value and growth stocks portfolios (HML_t). In the four-factor model proposed by Carhart (1997) the discount factor has the following form:
$$M_t = a + \beta_{RM} RM_t + \beta_{SMB} SMB_t + \beta_{SMB} HML_t + \beta_{SMB} WML_t \quad (3)$$

where WML_t is a momentum factor, i.e. it is the difference between portfolios of stocks with the highest and lowest returns in the previous year.

Source: Czapkiewicz and Wójtowicz (2014), The four-factor asset pricing model on the Polish stock market; Economic Research-Ekonomska I, 27, Iss 1, 771-783.)

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(i) Based on Fama and French (1992), the factors explain stock returns are SMB and HML, other than the beta. Explain the findings of the analysis on SMB and HML. (10 marks)

(ii) Carhart (1997) further added one additional factor, WML. Explain the findings. (5 marks)

(b) Explain what behavioral finance is. Who are the noise traders? (5 marks)

(c) Explain efficient frontier. (5 marks)

QUESTION 4 (25 MARKS)

(a) An extracted article on ESG investing is presented below. Read it carefully and answer the following questions.

The wages of social responsibility — where are they? A critical review of ESG investing

Gerhard Halbritter and Gregor Dorfleitner

Abstract
This paper contributes both to investigating the link between the corporate social and financial performance based on environmental, social and corporate governance (ESG) ratings and to reviewing the existing empirical evidence pertaining to this relationship. The sample used includes ESG data of ASSET4, Bloomberg and KLD for the U.S. market from 1991 to 2012. The econometrical framework applies an ESG portfolio approach using the Carhart (1997) four-factor model as well as cross-sectional Fama and MacBeth (1973) regressions. Previous empirical research indicates a relationship between ESG ratings and returns. As against this, the ESG portfolios do not state a significant return difference between companies with high and low ESG ratings. Although the Fama and MacBeth (1973) regressions reveal a significant influence of several ESG variables, investors are hardly able to exploit this relationship. The magnitude and direction of the impact are substantially dependent on the rating provider, the company sample and the particular subperiod. The results suggest that investors should no longer expect abnormal returns by trading a difference portfolio of high and low rated firms with regard to ESG aspects.

1. Introduction
Several studies examine the relationship between a company's social and financial

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performance based on environmental, social and corporate governance ratings, or short ESG ratings, mostly finding a positive connection. This paper contributes to this subject by revisiting the evidence from the perspective of a U.S. investor utilizing the data of three different ESG ratings. By analyzing the problem with a sample consisting of data up to 2012 and by applying an econometrically sound methodology, we show that the positive effects reported earlier are both dependent on the rating concept used and the time interval in which the observations were made.

Throughout the last decade, Socially Responsible Investments (SRIs) have experienced an impressive development. According to the U.S. Forum for Sustainable and Responsible Investments USSIF (2012), SRIs account for more than 20% of the global capital market. Assets exceeding $30 trillion are based on SRI principles. These figures reveal the outstanding importance for both investors and researchers. Apart from the corporate financial performance (CFP), private and institutional investors are increasingly interested in the corporate social performance (CSP) of a particular company. Firms are being ever more encouraged to consider non-monetary goals.

Nevertheless, most investors consider social concerns just as a side condition while a maximization of the return is still the primary objective. In this context the question of whether there is a link between the financial and social performance of a company arises. Even investors without non-monetary interests could exploit a potential relationship to gain abnormal returns. A meta-analysis of Orlitzky, Schmidt, and Rynes (2003) finds that the CFP is positively correlated with the CSP while the dependence is bidirectional and simultaneous. Wallis and Klein (in press) also suggest that there is a certain amount of evidence for an outperformance of socially responsible over conventional investments.
The oldest line of SRI research is concerned with a comparison of the performance of conventional and SRI funds. Most studies in this field, such as Hamilton, Jo, and Statman (1993), Statman (2000), Bauer, Koedijk, and Otten (2005), Bello (2005), Kreander, Gray, Power, and Sinclair (2005), and Utz and Wimmer (2014), do not indicate significant performance differences. A number of papers, such as Sauer (1997), Statman (2000), Schröder (2004), Statman (2006), Schröder (2007), and Lee and Faff (2009), do not provide evidence of an out- or underperformance of SRI indices compared to conventional indices. A recent analysis of Belghitar, Clark, and Deshmukh (2014) finds that there is no difference regarding the expected returns and their variance. However, SR investors pay a high price in terms of utility if higher moments are taken into account.

(Source: Halbritter and Dorfleitner (2015), The wages of social responsibility- where are they? A critical review of ESG investing, Review of Financial Economics, Vol. 26, pp. 25-35.)

(i) Explain environmental, social and corporate governance (ESG). (6 marks)

(ii) For your point of view, discuss the effect of social responsibility investing on firm performance. (6 marks)

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(b) The Star Online n6ews dated 9 December 2017 by Yap Ming Hui

Equity crowdfunding and peer-to-peer lending

"IT is little wonder that investors are always on the lookout for other means of increasing their wealth when interest rates for fixed deposits are meagre to say the least, and the stock market has not been performing too brilliantly of late.

Enter equity crowdfunding and peer-to-peer lending.

It is clear that the popularity of crowdfunding is rapidly growing, judging by the number of queries I have received. Coming from a professional standpoint, I see an urgent need to make sense of what this means to you as an individual investor, and offer some guidelines to follow, especially when investing in this brave new world of investment opportunities."

(Source: The Star Online, 2017)

Explain what equity crowdfunding and peer-to peer lending are. (8 marks)

(c) What is fintech? How does fintech shape the financial services? (5 marks)

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